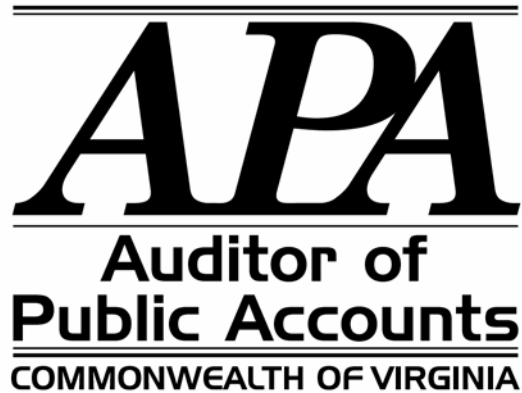


**REVIEW OF THE COMMONWEALTH'S
SUPPLIES AND MATERIALS
AND
CONTROLLABLE ASSETS**

NOVEMBER 2005



EXECUTIVE SUMMARY

The Commonwealth spent approximately \$1.042 billion for supplies and materials and \$904.6 million on fixed assets during fiscal year 2004.

The Commonwealth does not provide agencies and institutions with guidance to assist them in determining whether to maintain inventory records for supplies and materials purchased, and there are no policies and procedures relating to maintaining or controlling that inventory when necessary. As a result, agencies may inventory items unnecessarily or may not inventory items that they should. In addition, many agencies are developing their own policies and procedures that may not be in line with the best practices for supplies and materials management. Most agencies do not have adequate written policies and procedures for their inventory function.

The Commonwealth has adequate policies and procedures governing controllable asset management. These policies and procedures mirror that of the best practices.

To improve overall supplies and materials management, the report includes recommendations for the Department of Accounts to provide state agencies and institutions with guidance on how to determine what items to include in supplies and materials inventory. This guidance should consider the cost-benefit and risks to tracking and recording different classes of inventory. The Department of Accounts should also develop policies and procedures for supplies and materials inventory management for agencies that determine inventory records are necessary.

This review included some of the agencies that have a large amount of expenses associated with supplies and materials. We also recommended various changes in policies and procedures for the following agencies.

- Department of Alcoholic Beverage Control
- Department of Corrections
- Department of General Services (Virginia Distribution Center)
- Department of Mental Health, Mental Retardation, and Substance Abuse Services
- Department of State Police
- Virginia Correctional Enterprises
- Virginia State University

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INTRODUCTION

The Commonwealth spent approximately \$1.042 billion for supplies and materials and \$904.6 million on fixed assets during fiscal year 2004. The purchases represented everything from pencils to computer equipment and items used within a few hours to items stockpiled for emergencies. This array of purchases represents a challenge to the managers of state agencies in determining the level of accountability necessary to show how they use items, who has them, and whether they served their intended purpose. In addition to the questions of accountability is how to balance the cost and complexity of tracking these items.

Some groups have criticized agencies for only reporting, for financial purposes, inventories having a value of over a \$1 million. However, as we have found, many have inventory records and systems that track amounts as small as \$1,000. The maintenance of inventory records is typically an economic issue in which one considers the overall cost of record maintenance against the value of items controlled, however, the discussion that follows shows that there is more to this issue than items or dollars.

Inventory records can serve many different purposes. An inventory is a listing of items with pertinent information about each item, which may include a description, location, the number of items on hand, the item's condition, its use, the responsible individual, etc. The extent, quantity, and quality of the listing depends on the purpose of the inventory. Some purposes for maintaining an inventory include the following:

- for financial reporting purposes to document on the financial statements the amount of inventory owned at year-end;
- to track raw materials used during a manufacturing process to ensure an adequate supply is available to meet current demand and to calculate the sales price of the finished good;
- to track goods held for resale to ensure an adequate supply is available to meet sales demands and determine sales price;
- to reduce risks, such as theft and abuse, related to highly valuable or portable items; and
- to address risks specific to the atmosphere in which the item is used, for example, security concerns in a prison.

The types of items included in an inventory can vary. There can be an inventory of capital assets, which are tangible assets with a higher dollar value that have a useful life of more than one year. The purpose of inventorying capital assets is often for financial reporting and accountability. Another type of inventory is controllable assets, which are lower dollar assets with a useful life of more than one year. The purpose of inventorying controllable assets is for accountability and stewardship of the asset. Finally, there are inventories of supplies and materials. Supplies and materials are items purchased for use within the normal course of business and usually consumed within a short time period. The purpose of supplies and materials inventory is to monitor amounts on hand and determine when to reorder to ensure adequate quantities are on hand at all times.

There are many considerations when determining whether inventory records are necessary. The first consideration should be whether it is cost beneficial to maintain an inventory. There are many ways to look at cost benefit. One is whether the benefit of keeping the inventory is worth the cost. This benefit depends on the atmosphere in which the item is used. For example, in a normal maintenance shop environment, inventorying low cost tools such as screwdrivers and hammers is not necessary. However, in a prison

environment, keeping track of these items is a security issue as prisoners can use them as weapons. In this situation, the cost is irrelevant; the benefit will always outweigh the cost.

Another way to analyze the cost benefit of inventorying is to compare the cost to inventory the item to the cost of the individual item. The cost to inventory an item includes costs such as personnel time to continuously track the item, personnel to perform the periodic inventory counts, inventory system acquisition, and system maintenance. If the cost to inventory an item is greater than the cost of the item, it is usually not beneficial to maintain an inventory of that item unless there is some other reason like those discussed above. For example, there is no cost benefit to maintaining an inventory of office supplies such as paper, pencils, and paper clips unless you maintain a very high volume of these items.

Another consideration is the risks surrounding the use of the item. For items such as weapons, adequate safeguards including inventories must be in place to counteract the risk of inappropriate use of the weapon. For items such as cell phones, pagers, and credit cards, there is a risk of increased expenses if used by the wrong individual or in an inappropriate manner. Knowing who has custody and responsibility for these items is very important. Tight control of prescription drugs through an inventory and physical safeguards to prevent improper use or distribution is essential.

When purchasing supplies and materials, agencies must determine whether it is necessary or beneficial to track and record these items through inventory records. Agencies should always track items purchased for resale or manufacturing with an inventory. This inventory assists in having the necessary quantities on hand and in determining sales price. There are many instances where keeping inventory records for supplies and materials is not necessary or cost beneficial. Therefore, agencies must consider the cost, benefit, environment, and risk to determine whether to maintain inventory records for these items. However, as we note throughout this report, the Commonwealth does not provide agencies and institutions with guidance to assist them in making this determination.

Agency Definitions

The main distinguishing factors between controllable assets and supplies and materials are the cost per item and the amount of time the item stays on hand. Because of these factors, the purpose and benefit of maintaining inventory records for these items is different. As a result, the Commonwealth maintains inventory records for controllable assets and supplies and materials separately.

Agencies within the Commonwealth have a good understanding of the difference between supplies and materials and controllable assets. We found that agencies consistently distinguish between items for supplies and materials from controllable assets. This distinction is important in ensuring proper accountability and control.

Agencies visited defined supplies and materials as resale items or consumable items used in the normal course of business.

Agencies visited defined controllable assets as any tangible property that cost under the Commonwealth's capitalization threshold of \$5,000 and has a useful life of over a year. Most agencies set additional limits on their controllable assets so that they were efficient in controlling them. For example, Department of Corrections and Virginia Correctional Enterprises consider controllable assets to be tangible property with a cost of \$2,000 to \$4,999 and a useful life of over a year. Whereas, the Department of Mental Health Mental Retardation and Substance Abuse Services considers controllable assets to be tangible property with a cost of \$500 to \$1,499 and a useful life of over a year, while they capitalize any asset with a cost greater than \$1,499.

We agree with and will use these definitions throughout this report.

Recordkeeping for Supplies and Materials Inventory

If agencies determine that maintaining inventory records for specific supplies and materials is necessary, they have two methods that they can use to record the inventory: perpetual or periodic. The perpetual inventory method controls stock by keeping track of all additions and deletions to inventory as they happen throughout the year, typically using an automated information system. This method allows the agency or institution to know the value of their inventory and quantity of supplies and materials on hand at any given time, but may have significant costs associated with maintaining the records. When using the periodic inventory method, the agency or institution does not maintain detailed inventory records for additions and deletions throughout the year. The agency or institution will periodically count their inventory and update the system or records for the amount of inventory on hand.

STUDY METHODOLOGY

We reviewed policies and procedures relating to controllable assets including the Commonwealth Accounting Policies and Procedures Manual (CAPP). In reviewing this Manual, we determined that there is no guidance for agencies to determine whether they should maintain inventory records for supplies and materials and there are no policies and procedures relating to maintaining or controlling that inventory when necessary.

We reviewed policies and procedures for controllable assets from other state and institutional websites including the State of Connecticut, Northwest Territories, and Concordia University. We reviewed policies and procedures for supplies and materials inventory from other state and institutional websites including Maryland Department of General Services, Alaska Department of Transportation, New York State Comptroller, and the University of California. In addition, we reviewed the Comptroller's Directive Attachment for the Schedule of Inventory on Hand at June 30. We conducted interviews with key personnel and observed inventory at various agencies.

We surveyed 39 agencies and institutions to collect and analyze supplies and materials purchases and inventory and controllable asset management data. Information collected for supplies and materials includes: whether the agency has an inventory of supplies and materials items, types of items included in this category, systems/applications used to track those items, estimated value of the items, policies and procedures for the inventory, and privatization of inventory including cost benefit analysis. Information collected for controllable asset management includes types of items included in this category and methods of maintaining control over these assets. See the chart below for agency responses.

We visited 7 of 39 agencies that had over \$1 million in supplies and materials purchases during fiscal year 2004. These agencies include Department of State Police, Department of Corrections (Brunswick and Deep Meadow Correctional Facilities), Department of Mental Health, Mental Retardation and Substance Abuse Services (Southside Virginia Training Center, Hiram Davis Medical Center, and Central State Hospital), Department of General Services (Virginia Distribution Center), Virginia Correctional Enterprises, Department of Alcoholic Beverage Control, and Virginia State University. At these seven agencies, we tested the purchase, receipt, valuation, recordation, issuance, billing, and monitoring of supplies and materials items and controllable assets.

SURVEY RESULTS

	YES	NO	N/A
Does the agency have a supplies and materials inventory?	35	4	-
Does the agency have a system or application that is used to track and account for your agency's inventory?	31	4	4
Does the agency have written policies and procedures regarding supplies and materials inventory?	17	18	4
Does the agency have controls over controllable assets?	39	-	-

In our initial survey, based on the results noted above and additional information gathered, we found that most agencies maintain an inventory of some type of supplies and materials. Most agencies that have inventory have some method to track and account for the inventory with methods ranging from manual records to internally developed spreadsheets and databases to externally developed or purchased software. However, only half of the agencies with inventory have policies and procedures covering that inventory. We also found that the value of supplies and materials inventory varies greatly throughout the Commonwealth. Among the 39 agencies and institutions surveyed, the dollar value for inventory at each agency ranged from \$500 to \$25 million. Items included in inventory varied greatly from agency to agency. The most common supplies included in inventory are:

- Office
- Medical and health care
- Items held for resale
- Repair and maintenance
- Law enforcement

Forty percent of the agencies surveyed mentioned that they privatized portions of their operations including the inventory functions within those operations. The majority of these agencies were colleges and universities that privatized their food services or bookstore operations. Of those agencies, forty percent stated that they did not perform a cost benefit analysis to ensure that it was beneficial to privatize these operations, or if they did, it had been so long ago that they were unable to locate any documentation of the analysis.

The majority of the agencies surveyed included similar items in their controllable asset category. Types of assets that are included in the controllable asset category include:

- Computers and computer related assets
- Office furniture and equipment
- Telecommunications equipment
- Law enforcement equipment

All of these agencies had some controls established over their controllable assets based on the Commonwealth's policies and procedures.

CATEGORIES

Supplies and Materials Inventory

The state agencies visited during this review have many different types of supplies and materials inventory. The following is a description of what they include in their inventory.

- State Police has inventory that consists of officer uniforms, K-9 supplies, automobile repair parts, office supplies, and armory supplies. Many of these items are critical to State Police's mission. An accurate inventory helps ensure adequate supply levels of essential items such as weapons and auto repair parts to ensure state troopers can perform their duties without delays or inadequate equipment.
- Department of Corrections has 27 major correctional facilities, six work centers, two reception and classification centers, one treatment center, and 13 field units. This study focused on Brunswick and Deep Meadow correctional facilities. Both facilities have inventory that consists of inmate clothing, health care items, food supplies, office supplies, buildings and grounds supplies, and officer uniforms. Many of Corrections' inventoried items support the daily living requirements of the prisoners. Maintaining an inventory allows Corrections to monitor, forecast, and order items to meet the prisoners' needs. Correction also inventories some items for security purposes. Some items that are mundane in other situations can pose safety concerns in the hands of a prisoner. Knowing the location and number of these items reduces the security risks.
- Mental Health has ten mental health facilities, five mental retardation facilities, and one medical center. This study focused on Southside Virginia Training Center, which includes Hiram Davis Medical Center and Central State Hospital. Southside Virginia Training Center's inventory includes patient clothing, health care items, office supplies, adaptive equipment supplies, craft materials, and linens. In addition to the items listed above, Hiram Davis Medical Center has an inventory of medical drugs. Similar to Corrections, Mental Health's inventory supports the daily living needs of the patients and clients. Mental Health must inventory its prescription drugs for the safety and health of the patients.
- Department of General Services' Virginia Distribution Center has inventory that consists of merchandise for resale to other state agencies and localities. This merchandise includes food, chemical and paint supplies, paper, etc. Since the Distribution Center's business is resale of goods, maintaining an inventory of merchandise is essential to forecasting and maintaining an adequate supply on hand to meet sales demands and provide customers with timely service.
- Virginia Correctional Enterprises' inventory includes raw materials and work in process for use in its manufacturing process and finished goods for sale to state agencies, localities, and not-for-profit organizations. As a manufacturer, Correctional Enterprises uses its inventory records to determine supplies and materials needed to meet production needs in order to meet sales demands.

- Department of Alcoholic Beverage Control manages resale and non-resale supplies and materials inventory. The non-resale inventory consists of office supplies and store operation supplies. The resale supplies include alcohol and other items sold at the local Alcoholic Beverage Control Stores. Alcoholic Beverage Control uses its inventory records to ensure adequate quantities are on hand to meet sales demands and to control the alcohol since it is a regulated substance.
- Virginia State University has many different types of inventory items located in various departments within the University. This review focused on three departments including Facilities – Repair Shop, Auxiliary Services, and Student Health Services. The University’s inventory includes office, medical/health, vehicle repair, and campus building maintenance supplies. The University maintains various inventory records to meet the needs of each department.

Controllable Assets

The state agencies visited during this review account for controllable assets similar to the way they account for their capital assets.

The Commonwealth has two different categories for assets due to the cost benefit derived from tracking and recording assets under a certain dollar value. The Commonwealth defines controllable assets as tangible property that has an expected life of greater than one year and a value or cost less than \$5,000 at the date of acquisition. A capital asset is an asset that has an expected useful life of greater than one year and the asset individually has a value or cost of \$5,000 or more at the date of acquisition.

State agencies control assets in several ways such as assigning a responsible custodian to each asset, tracking the asset’s location, ensuring personnel properly care for the asset and use it for Commonwealth business only, and establishing security measures to safeguard the asset from theft and abuse.

The following is a description of what each state agency reviewed includes in controllable assets.

- State Police, Virginia Distribution Center, and Virginia Correctional Enterprises control all tangible assets that are under \$5,000 and have a useful life of greater than one year.
- Department of Corrections considers all tangible assets that cost between \$2,000 and \$5,000 and have a useful life of greater than one-year controllable assets.
- Southside Virginia Training Center controls all tangible assets with a value of \$500 to \$1,499 and a useful life greater than one year. The Training Center does not control Federal property under \$1,500.
- Alcoholic Beverage Control includes all tangible assets that cost between \$500 and \$4,999 and have a useful life of greater than one year as controllable assets.
- Virginia State University controls all tangible assets that cost between \$2,000 and \$4,999 with a life of two or more years. They also control all computers, printers, and electronic items under \$2,000.

METHODS AND SYSTEMS

Supplies and Materials Inventory

The state agencies visited during this review account for their supplies and materials inventory using either the perpetual or periodic method or a combination of the two methods. Because there is not a statewide system for inventory, agencies have developed many manual and automated processes to manage their inventory. These solutions range from simple spreadsheets and databases to complex systems. Agencies internally develop some systems, purchase them out of the box, or hire external vendors to design and develop others to meet agency specific needs.

State Police internally developed a perpetual inventory system called the Materials Management System to track and record information on their supplies and materials inventory. The system has many problems including inaccurately recording data, which can result in the system altering the quantity of inventory received (i.e. case verses each) after the warehouse personnel enter the amount received into the system. We reviewed this system in detail during a separate audit. Additional information about this system is available in the audit report entitled: Review of Information Systems Development and Implementation Methodology issued December 2004. Due to the shortcomings in the design of the Materials Management System, State Police is considering obtaining a new system for inventory. One option under consideration is Oracle. State Police recently purchased Oracle Financials, which has an inventory module they may consider using in the future.

Brunswick Correctional Facility has decentralized and varied inventory management methods and systems. The central warehouse developed a perpetual Access database for managing their supplies and materials inventory. Food Service, Inmate Clothing/Laundry, Building and Grounds, and the Women's Work Center maintain manual, periodic inventory records. Deep Meadow Correctional Facility manages their inventory centrally at the central warehouse with a perpetual inventory system called Peachtree. Both Brunswick and Deep Meadow Correctional Facilities have systems that effectively track their supplies and materials inventory. However, to improve efficiencies, the Department of Corrections is considering purchasing an inventory system for all correctional facilities to use. This system will provide consistency in recording and reporting inventory at each correctional facility across the Department.

Southside Virginia Training Center manages the majority of their supplies and materials inventory using a perpetual inventory module of the Financial Management System II (FMSII). FMSII effectively tracks supplies and materials inventory for Southside Virginia Training Center but there could be some improvements in the efficiency of the system. The system has minimum and maximum stock levels set within it for each inventory item. Southside Virginia Training Center is not properly evaluating these stock levels or if they are evaluating the stock levels, they are not updating the system to reflect their evaluation. In addition to FMSII used by the Training Center, the Medical Center maintains its drug inventory in several different ways. They keep high-level drugs in a vault and medium-level drugs in a stockroom. They use a perpetual inventory log to track all high-level and medium-level drugs. They keep over-the-counter drugs in a storeroom and maintain a periodic inventory for them. The systems and applications used by the Medical Center are effective for tracking their drug inventory.

Virginia Distribution Center manages their supplies and materials inventory on a perpetual system called Warehouse Management System for the 21st Century (WMS21). The Distribution Center purchased WMS21 from a vendor that has since gone out of business. Therefore, WMS21 is not a vendor-supported system, resulting in the Distribution Center not being able to obtain patches and updates to the system. The Department of General Services currently provides internal support for WMS21.

Virginia Correctional Enterprises manages their supplies and materials inventory on a perpetual system called SyteLine Enterprise Resource Planning System. This system is both effective and efficient for

Virginia Correctional Enterprises. This system fully integrates accounting, purchasing, inventory, and warehousing for a manufacturing environment. SyteLine also creates automatic replenishment orders based on statistical forecasts of need.

Alcoholic Beverage Control manages their supplies and materials inventory using multiple integrated, perpetual systems. The systems used include the following:

- PERFORMANCE, which is the financial system.
- Supply and Equipment Inventory System (SEIS), which manages the non-resale supplies and materials.
- Management of Inventory Products System (MIPS), which tracks alcohol purchases and issuances.
- THRIVE, which is a forecasting system that interfaces with MIPS to forecast the needs of individual stores and create an automatic order in MIPS.
- Point of Sale System that interfaces with MIPS to record the sale of the merchandise at the local Alcoholic Beverage Control Store.
- MOVE System, which tracks the movement of merchandise at the warehouse.

These integrated systems are both effective and efficient for Alcoholic Beverage Control. These systems work well together to track and record all inventory items with Alcoholic Beverage Control.

Virginia State University has decentralized and varied inventory management methods and systems. The University leaves it up to each department to determine how to track and manage inventory. They do not provide guidance as to the types and levels of inventory that the departments should track and accumulate for accountability or financial reporting. For example, the Facilities – Repair Shop manages its supplies and materials inventory using a perpetual system within Quick-books work-order system. Auxiliary Services and Student Health Services manage their supplies and materials inventory periodically using excel spreadsheets. There are many other departments with inventory. These methods of tracking supplies and materials inventory are effective for the individual departments; however, it is inefficient to have each department develop its own system and method. The University should establish a policy to provide guidance on the management and control of supplies and materials inventory and taking physical inventory. The University should consider the cost-benefit to tracking and recording different classes of inventory. The University should consider providing an automated method for each department to track its inventory.

Agencies that need to maintain inventory records for supplies and materials have either developed or procured their own inventory management system or done without one due to the prohibitive cost of acquiring one for their needs. Some agencies spend a lot of money on materials and supplies that should be inventoried but they do not track or account for the items because they do not have an affordable system. Some agencies spend little on supplies and materials, but unnecessarily maintain inventory records or purchase systems. If a statewide system was available, then agencies could use or purchase the system to track their supplies and materials items that need to be inventoried thus increasing inventory management efficiencies within the Commonwealth.

Recommendation: The Commonwealth should consider purchasing either a statewide inventory management system or having an inventory system under contract that individual agencies can affordably purchase and use within their agency if they determine that it is necessary to track and record their supplies and materials. The system should incorporate inventory management best practices and controls.

Controllable Assets

The state agencies visited have several systems and methods that they use to record and track their controllable assets. Some of the agencies have their own system or application that is used to record and track the assets. The others use the Commonwealth's Fixed Asset Accounting and Control System (FAACS).

- State Police enters controlled assets into their Materials Management System. Virginia Distribution Center has very few controllable assets. Therefore, they record sensitive controllable assets on a log sheet or keep them under lock and key.
- Virginia Correctional Enterprises and Department of Corrections enter controllable assets into FAACS. Corrections also enters all weapons into FAACS regardless of the acquisition cost.
- Southside Virginia Training Center enters controlled assets below \$1,499 into an Access Database. The Training Center enters assets between \$1,499 and \$5,000 into FAACS.
- Alcoholic Beverage Control records controlled assets in SEIS (Supply and Equipment Inventory System).
- Virginia State University enters electronic assets that cost between \$2,000 and \$4,999 into FAACS. They enter all other controlled assets into a Controllable Asset Access Database. In addition to FAACS and the Controllable Asset Access Database, the University enters electronic items into an Office of Information Technology (OIT) Access Database.

During our review, we determined that the controls surrounding controllable assets were adequate at all state agencies visited except for Virginia State Police, Virginia State University, and Southside Virginia Training Center.

Virginia State Police does not have written policies and procedures for controllable assets. Therefore, it is difficult for each of the departments to know what they must enter into the Materials Management System. Due to the lack of written policies and procedures, Virginia State Police did not enter two of the 26 assets tested into the Materials Management System. Assets not recorded in the Materials Management System included sensitive equipment such as a digital videocassette recorder. If State Police does not record these assets in the system then these assets are susceptible to theft or loss, especially since they are easily transportable. Since this review, Virginia State Police has begun drafting written policies and procedures.

Recommendation: We recommend that Virginia State Police develop written policies and procedures for controllable assets.

Virginia State University does not ensure that the University records all required controllable assets into FAACS or the Controllable Asset Database. Of the assets tested, the University did not enter two of ten assets into the proper system. In addition, one of ten assets tested did not have a receiving report.

Recommendation: We recommend that Virginia State University improve controls surrounding their controllable assets to ensure that they have proper support and personnel enter the assets into the appropriate system timely.

Southside Virginia Training Center does not ensure that they record all required controllable assets into the Controllable Asset Database and tag them with an asset tag. Of the 15 assets tested, the Training Center did not record one asset in the Controllable Asset Database and did not tag it with an asset tag. The Buildings and Grounds Department directly received the assets, bypassing the warehouse. Items not received through the warehouse are at risk of the end-user not reporting the asset to the appropriate department for recording and tagging, increasing the items susceptibility to theft.

Recommendation: We recommend that Southside Virginia Training Center improve controls surrounding their controllable assets to ensure that departments receiving assets directly properly tag the asset and enter the asset into the proper database time.

POLICIES AND PROCEDURES

Industry Standards

While no authoritative body sets standards for supplies and materials or controllable asset management, we did find consistent policies and procedures when looking for industry standards. We reviewed policies and procedures for controllable assets from other State and institutional websites including the State of Connecticut, Northwest Territories, and Concordia University. We reviewed policies and procedures for supplies and materials from other state and institutional websites including Maryland Department of General Services, Alaska Department of Transportation, New York State Comptroller, and the University of California. We refer to these consistent policies and procedures as best practices throughout this report.

Supplies and Materials Inventory

We found the following best practices when researching industry standards relating to supplies and materials inventory:

- all supplies and materials received by an agency must be counted and inspected, with discrepancies promptly reported;
- issuances from inventory must be supported by signed requisitions;
- annual physical inventories must be conducted;
- annual counts must be compared to system counts to ensure accuracy in the system;
- perpetual inventory records should be maintained; and
- reorder points, minimum stock levels, maximum stock levels, and safety stock should be set for each item within the system.

Controllable Assets

We found the following best practices when researching industry standards relating to controllable assets:

- Assets have to be tangible property with a useful life of one year or more.
- These items have to be identified and controlled.
- An entity must maintain a listing of all items considered controllable assets. The listing can be within a system or on a log sheet.
- An inventory must be performed on a regular basis, possibly more frequently than capitalized assets due to the nature of the items, but at least annually.

We did not find any authoritative guidance on establishing thresholds for inventorying supplies and materials or identifying controllable assets. We found that some of the States and institutions that we reviewed used a supplies and materials threshold considering either annual expenses or year-end balances. This threshold should consider the cost associated with inventorying the item, how often the item is used, the item usage, quantities maintained, and risks. A threshold for controllable assets should consider use of the item, theft appeal, and sensitivity of the item.

Commonwealth Accounting Policies and Procedures

Supplies and Materials

The Commonwealth Accounting Policies and Procedures do not contain policies, procedures, or guidance relating to when and how to inventory supplies and materials. The only procedures that the Department of Accounts has for supplies and materials inventory is the Comptroller's Directive Attachment for the Schedule of Inventory on Hand at June 30. The Directive requires that all state agencies and institutions that have supplies and materials exceeding \$1,000,000 and have not reported them in a financial statement template must complete this attachment. This guidance is so broad that state agencies and institutions interpret the requirements differently. Some state agencies and institutions may apply the limit to each kind of inventory versus to supplies and materials as a whole. This leads to improper and inconsistent reporting of supplies and materials inventory totals at year-end.

The Commonwealth could increase efficiencies and create consistency in inventory if they developed policies and procedures that provided general guidance for the management of supplies and materials inventory and guidance on how to determine what types of items to include in inventory.

Recommendation: We recommend that the Department of Accounts develop policies and procedures that provide guidance for the management of supplies and materials inventory. These policies and procedures should include clarification of the Comptroller's Directive Attachment for the Schedule of Inventory on Hand at June 30. The Department of Accounts should consider the best practices and other recommendations mentioned in this report when developing general policies and procedures for supplies and materials inventory. The Department of Accounts should determine at what level state agencies and institutions should track supplies and materials inventory. The Department of Accounts should also consider setting dollar thresholds for which an agency needs to maintain a perpetual inventory system and/or track inventory.

Controllable Assets

Commonwealth Accounting Policies and Procedures state that central users may enter controlled assets in FAACS at the discretion of the agency to provide accountability and to help safeguard the asset. Agencies that can demonstrate that they have an acceptable means for controlling assets valued at less than the capitalization limit and that do not wish to use FAACS for controlling assets may use an alternative system of controlling lower valued assets.

State agencies must maintain proper stewardship over all agency fixed assets, including controllable assets. The agency has the discretion to develop its own policy regarding controlling or tracking controllable assets. The choice not to control or track certain classes of fixed assets on either FAACS, an agency-based automated system, or a computer application in no way eliminates the stewardship responsibility of the agency regarding these assets.

Department of Accounts recommends, but does not require agencies to control or track certain classes of higher valued controllable assets, such as easily transportable assets. State agencies may track these assets on FAACS, an agency-based fixed asset system, or a computer application.

We determined that the Commonwealth's policies and procedures regarding controllable assets were reasonable in comparison to the industry standards outlined above.

Agency Procedures

Supplies and Materials Inventory

All state agencies visited during this review, except for the Alcoholic Beverage Control, had written policies and procedures that govern the taking of physical inventory for supplies and materials. Not having policies and procedures for physical inventories could lead to improper valuation of ending inventory.

Recommendation: We recommend that the Alcoholic Beverage Control develop written policies and procedures that govern the taking of physical inventory for supplies and materials.

The policies and procedures that govern the taking of physical inventory at State Police had inefficiencies that need improvement.

State Police does not perform blind research counts (second, third, etc. counts) of their inventory items. Upon completion of the physical inventory, the MMS system at State Police prints a report listing all discrepancies that inventory personnel must research. This report contains the system's count for each item listed. Therefore, the researcher is not performing a blind count to determine the amount that should be in the system. Knowing the amount on hand in the system can negatively affect the objectivity of the personnel when counting. This can also lead to fraud by allowing the personnel to enter the amount listed on the report into the system as the amount counted without actually counting the items.

Recommendation: We recommend that State Police perform blind recounts by removing the system count from the listing of inventory items.

Most state agencies that we reviewed with the exception of Virginia State University and Brunswick Correctional Center have set minimum and maximum stock levels within their inventory system. A minimum stock level is the stock level at which an agency has reached the minimum amount that they should carry in inventory to meet needs before having to reorder. A maximum stock level is the maximum amount of stock

that an agency should physically have on hand. Even though most agencies set minimum and maximum stock levels, they are not using them accurately or consistently. In addition, most agencies base their stock levels on historical usage rather than forecasting their future requirements. This prevents them from considering new circumstances or conditions that could have an effect on the inventory level needed to operate.

Having accurate minimum and maximum stock levels and using them consistently can increase efficiencies in inventory. It will decrease the amount of inventory on hand by allowing the agency to order only items needed thus eliminating over ordering and stockpiling of inventory. As a result, there will be less obsolete or slow-moving inventory items.

Recommendation: We recommend that state agencies set minimum and maximum stock levels for inventory and that they use them accurately and consistently. The Department of Accounts should establish guidance on setting and using minimum and maximum stock levels for supplies and materials inventory.

State agencies, generally, do not set safety stock levels for their inventory. Safety stock is the level of stock that an agency should have on hand between the time they place an order and the time they receive the order without reaching the minimum stock level. Safety stock prevents the agency from running out of stock during the time it takes to replenish inventory. If the agencies do not consider a safety stock, there is a possibility that they may run out of inventory.

Most state agencies consider the safety stock level to be the minimum stock level set within their system. State agencies that set a safety stock level do not always properly determine what the level should be or use them once they have been set. For example, Southside Virginia Training Center keeps a three-month supply of everything, except for food, on hand at all times. Although there are very different items contained within stock, safety stock is not set for each item. Agencies tend to focus on ensuring they have plenty of materials on hand to meet their programmatic needs, often overstocking; however, they do not consider how to optimize their inventory levels. This determination should consider the cost of storing inventory, delivery costs, and whether there is a benefit of purchasing at different quantity levels.

Recommendation: We recommend that state agencies set and use safety stock levels for inventory. Each type of stock item should have a separate safety stock level. Southside Virginia Training Center should re-evaluate their safety stock and set new safety stock levels for each type of inventory. The Department of Accounts should provide guidance on how to determine safety stock levels.

Either state agencies do not monitor inventory turnover or they monitor it on an informal basis. Inventory turnover is the number of times an agency has completely depleted their inventory in a given period.

Currently, it is not possible to calculate a worthwhile inventory turnover for state agencies and institutions. As shown in the two charts below based on the amount of inventory on hand and the expenses associated with supplies and materials for the agencies visited during this review, we determined that the inventory turnover rates varied greatly from agency to agency. The variance is because all inventory type items are included in the supplies and materials expenses but only some types are included in the supplies and materials on hand at year-end. These two parts of the ratio must correlate or the turnover rate is invalid.

Agency	Supplies and Materials on Hand FYE03	Supplies and Materials Purchases FYE04	Supplies and Materials on Hand FYE04	Inventory Turnover Rate*
Alcoholic Beverage Control	\$29,150,129	\$264,092,758	\$34,773,442	7.4
Corrections	25,470,410	67,803,072	25,009,336	2.7
Mental Health	3,285,822	63,803,431	3,413,277	18.7
State Police	4,233,625	10,178,205	5,072,716	1.8
Virginia State University	368,148	1,959,104	433,910	4.4

* We calculated the Inventory Turnover Rate by determining the amount of inventory used during FY04 (Supplies and Materials on Hand FYE03 plus Supplies and Materials Expenses FYE04 minus Supplies and Materials on Hand FYE04) and then dividing that number by the Supplies and Materials on Hand FYE04.

Agency	Sales and Service Costs FYE04	Supplies and Materials on Hand FYE04	Inventory Turnover Rate*
Virginia Distribution Center	\$21,634,000	\$3,754,000	5.8
Virginia Correctional Enterprises	31,330,000	10,575,000	3.0

* We calculated the Inventory Turnover Rate by dividing the Sales and Service Costs FYE04 by the Supplies and Materials on Hand FYE04.

Inventory turnover is one method of analyzing inventory for an agency or institution. The inventory turnover shows how many times an agency uses or sells and replaces their inventory over a specific time-period. Typically a low turnover implies slow-moving, obsolete inventory or poor inventory usage and, therefore, excess inventory. However, the type of inventory on hand can also cause low turnover rates, such as emergency response equipment held by State Police. In most cases, a high turnover implies just in time purchasing or strong sales.

Inventory turnover is a good indicator of inventory quality, efficient buying practices, and inventory management. Thus, monitoring inventory turnover would allow the state agencies to determine if they possibly have obsolete or slow-moving inventory items, inefficient buying practices, or poor inventory management.

Recommendation: We recommend that the Department of Accounts set guidelines for monitoring inventory turnover.

The Commonwealth does not provide agencies with guidance on when to inventory supplies and materials. Nor is there guidance on what types of supplies and materials the agencies should inventory.

The Commonwealth could increase efficiencies and consistencies in inventory if they provide guidance on how to determine what supplies and materials state agencies and institutions should include in

inventory. This guidance should include considerations of the costs, benefits, and risks surrounding the items or in their environment.

Recommendation: The Commonwealth should provide state agencies and institutions with guidance on how to determine what items to include in supplies and materials inventory. This guidance should consider the cost-benefit and risks to tracking and recording different classes of inventory and consider the fact that it is not necessary to inventory all supplies and materials. The Commonwealth should also establish recommended procedures on how to analyze and use inventory turnover rates as a management tool.

In addition, we determined that some state agencies do not have written policies and procedures that govern the management of supplies and materials inventory. Management of supplies and materials inventory includes:

- ordering inventory items for stock when stock is depleted;
- receiving inventory items into stock;
- issuing inventory items to departments or other agencies or institutions;
- billing for inventory items shipped to other agencies or institutions;
- valuing and recording inventory items within the inventory system;
- setting and monitoring accurate minimum, maximum, and safety stock levels within the inventory system;
- identifying obsolete, slow-moving, defective, or excessive inventory items and properly disposing of them;
- safeguarding inventory items;
- monitoring and using inventory reports from the system; and
- handling consignment inventory.

Not having written policies and procedures could cause the improper recording, ordering, and monitoring of inventory items and improper overall management of inventory.

Recommendation: We recommend that all state agencies that maintain supplies and materials inventory records develop written policies and procedures that govern the management of supplies and materials inventory. State agencies should develop written policies and procedures using the policies and procedures that we recommend the Department of Accounts develop as a basis.

Controllable Assets

The agencies' policies and procedures governing controllable assets either reflect or are the state's Commonwealth Accounting Policies and Procedures for controllable assets. Three of the eight agencies visited use the Commonwealth Accounting Policies and Procedures Manual as their policies and procedures for controllable assets. The remaining agencies have developed their own policies and procedures for

controllable assets. These policies and procedures include all of the information contained in the Commonwealth Accounting Policies and Procedures Manual as well as agency specific information such as having a lower threshold for controlling capital assets.



Commonwealth of Virginia

Walter J. Kucharski, Auditor

**Auditor of Public Accounts
P.O. Box 1295
Richmond, Virginia 23218**

October 28, 2005

The Honorable Mark R. Warner
Governor of Virginia
State Capitol
Richmond, Virginia

The Honorable Lacey E. Putney
Chairman, Joint Legislative Audit
and Review Commission
General Assembly Building
Richmond, Virginia

We have completed our review of supplies and materials and controllable assets in the Commonwealth of Virginia and submit this report: **Review of the Commonwealth's Supplies and Materials and Controllable Assets**. We reviewed the management processes over supplies and materials as well as controllable assets. We reviewed the purchasing, receiving, valuing, recording, issuing, billing, and monitoring of supplies and materials and controllable assets.

We conducted our review in accordance with the standards for performance audits set forth in **Government Auditing Standards**, issued by the Comptroller General of the United States.

Objectives

We had four main objectives in our review of the Commonwealth's Supplies and Materials and Controllable Assets. These objectives were to:

1. Establish a statewide definition of supplies and materials and controllable assets.
2. Review and document what items the Commonwealth maintains in supplies and materials inventory and classifies as controllable assets.
3. Review and document the processes used in the Commonwealth for management of supplies and materials inventory and controllable assets.
4. Determine how the Commonwealth's process compares with private industry practices and other best practices for supplies and materials inventory and controllable asset management.

Scope

We surveyed 39 agencies and institutions to collect and analyze supplies and materials purchases and inventory and controllable asset management data. Information collected for supplies and materials included: whether the agency had an inventory of supplies and materials items, types of items included in this category,

systems/applications used to track those items, estimated value of the items, policies and procedures for the inventory, and privatization of inventory including cost benefit analysis. Information collected for controllable asset management includes types of items included in this category, and method of maintaining control over these assets.

We visited 7 out of 39 agencies (including two Department of Correction's facilities and one Mental Health institution that functions as the warehouse for three institutions) that had over \$1 million in expenses for supplies and materials during fiscal year 2004. At these seven agencies, we tested the purchase, receipt, valuation, recordation, issuance, billing, and monitoring of supplies and materials items and controllable assets.

We performed research to identify private industry and other state government best practices for supplies and materials and controllable asset management. We used these various sources to compare to the Commonwealth's procedures. We developed definitions for supplies and materials and controllable assets to ensure consistency in addressing this issue.

Results

We determined that the Commonwealth does not provide agencies and institutions with guidance to assist them in determining whether to maintain inventory records for supplies and materials purchased, and there are no policies and procedures relating to maintaining or controlling that inventory when necessary. Most state agencies do not have adequate written policies and procedures for the management of supplies and materials inventory. There are many different systems used throughout the state to track and record supplies and materials inventory.

We also determined that the guidance provided by the Commonwealth for controllable asset accounting and reporting is in line with that of the best practices that we found. State agencies are tracking and recording their controllable assets as outlined within the Commonwealth's Policies and Procedures Manual.

We recommend that the Department of Accounts develop general guidelines for all state agencies to follow to determine when to inventory supplies and materials and how to manage that inventory. These general guidelines should be included in the Commonwealth's Policies and Procedures Manual. In addition, we recommend that all state agencies develop written policies and procedures that exceed the Department of Account's general guidelines for supplies and materials inventory management.

We discussed this report with the management of the following agencies: Department of Accounts; Department of Corrections; Department of General Services; Virginia State Police; Department of Mental Health, Mental Retardation, and Substance Abuse Services; Virginia Correctional Enterprises; Department of Alcoholic Beverage Control; and Virginia State University. We have included responses from the Department of Accounts, Virginia State Police, and Virginia State University at the end of this report. The remaining agencies concurred with the report and chose not to respond in writing.

AUDITOR OF PUBLIC ACCOUNTS

DBC/kva

AGENCY RESPONSES

Auditor of Public Accounts' Comment: Department of General Services

The Auditor of Public Accounts' normal policy provides agencies with five business days from receipt of the final report to provide a written response for inclusion in the published report. The Auditor provided the Department of General Services a copy of the draft report on October 12, 2005, for review, comment, and exit. General Services chose not to comment or exit and, therefore, the Auditor did not change the content of the report affecting General Services.

The Auditor then provided General Services with a copy of the final report on November 1, 2005, requesting written responses by November 7, 2005, which allows for the normal response time. Again, General Services chose not to respond until contacted again by our office on November 8, 2005, at which time they provided the attached response.



COMMONWEALTH of VIRGINIA

DAVID A. VON MOLL, CPA
COMPTROLLER

Office of the Comptroller
November 3, 2005

P. O. BOX 1971
RICHMOND, VIRGINIA 23218-1971

Mr. Walter J Kucharski
Auditor of Public Accounts
James Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Dear Mr. Kucharski:

The Department of Accounts (DOA) appreciates the opportunity to respond to the recommendations contained in your Report on Supplies and Materials Inventory. Thank you in advance for publishing this response with your report.

DOA's Response to Developing Policies and Procedures

DOA acknowledges that there are currently limited policies and procedures providing guidance on Supplies and Materials Inventory in the Commonwealth Accounting Policies and Procedures (CAPP) Manual. DOA will expand the CAPP Manual to include a specific section providing guidance on the management of supplies and materials inventory. DOA's inventory policies and procedures will incorporate inventory "best practices."

DOA's Response to Purchasing a Statewide Inventory Management System

DOA acknowledges that a statewide inventory management system could provide certain benefits to those agencies/institutions that currently do not have an automated inventory system. Inventory Control is included in the Supply Chain functional area currently being evaluated under the PPEA Enterprise Applications project.

Thank you again for the opportunity to comment on your review of Supplies and Materials Inventory.

Sincerely,

A handwritten signature in black ink, appearing to read "D. A. Von Moll".

David A. Von Moll

c: Ronald D. Necessary
Director of Financial Reporting.



Colonel W. S. (Steve) Flaherty
Superintendent
(804) 674-2000

COMMONWEALTH OF VIRGINIA

Lt. Col. Robert B. Northern
Deputy Superintendent

DEPARTMENT OF STATE POLICE

P. O. Box 27472, Richmond, VA 23261-7472

(804) 674-2000

November 4, 2005

MEMORANDUM

TO: The Honorable Walter J. Kucharski
Auditor of Public Accounts

FROM: Colonel W. Steven Flaherty *W. S. Flaherty*

SUBJECT: Review of the Commonwealth's Supplies and
Materials and Controllable Assets

There are a number of comments relating to the Department of State Police contained in the audit report that need to be addressed for clarity and to provide an explanation of the State Police procedures for supplies and materiel inventory management.

- The report states the State Police does not have written policies and procedures for controllable assets. The State Police has developed written policies and procedures for the controllable assets that are addressed in the audit report. This policy and procedures manual is 90% complete and should be finalized within 30 days.
- The report states the State Police does not perform blind research counts of their inventory items. There is a problem with the Materiel Management System (MMS) software. We are working with our IT personnel to change the inventory audit report to print with no balance listed. This would allow for a blind count. The blind count would prevent the storekeepers from being influenced by system or count balances. We expect to have the changes in place to allow for blind counts during our next inventory scheduled for January 2006.
- The report states that typically a low turnover implies slow-moving, obsolete inventory or poor inventory usage and, therefore, excess inventory. The Virginia State Police (VSP) is tasked with providing high quality, statewide law enforcement service to the citizens of Virginia and its visitors. There are approximately 2000 sworn law enforcement officers and approximately 500 civilians employed with VSP. With the numerous responsibilities associated with protecting our citizens, comes the important requirement to have on hand the

supplies and equipment necessary to accomplish all the tasks assigned. There are many variables involved in the decision-making process pertaining to inventory stock levels. Lead time in obtaining a certain commodity in the public safety arena is of primary importance. The number of law enforcement officers, the hundreds of different sizes of uniforms, shoes, boots, belts, hats, etc., plays a major role with stock on hand at any given point in time. The world market, manufacturing capabilities in the U.S. for textile industry, the Iraq war, hurricanes, etc., all have a direct impact on lead time and commodities required by the public safety community in their efforts to respond quickly and efficiently in emergencies. These factors necessitate the need for VSP to maintain sufficient on hand inventory. It could be a detriment to the Department's mission to have our inventory levels set without flexibility to consider outside influences.

- The report states that state agencies overall do not set safety stock levels for their inventory. Safety stock level is the level of stock that an agency can have on hand between the time they place an order and the time they receive the order without reaching the minimum stock level.

The Virginia State Police sets minimum and maximum stock levels for all warehouse stock items. Minimum stock levels are set based on lead time required to bid, order and receive the commodity without completely depleting that commodity. To set a safety stock level between minimum and maximum levels would contribute to, and show mathematically, a slower inventory turnover rate.

It is the intention of this response to provide an explanation of the methodology and procedures utilized by the Department of State Police for the management of our inventory.

WSF/DWD/FWI/jd



VIRGINIA STATE UNIVERSITY

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November 4, 2005

Mr. Walter J. Kucharski
Auditor of Public Accounts
P. O. Box 1295
Richmond, VA 22318

Dear Mr. Kucharski:

Virginia State University thanks you for the opportunity to respond to the report, "Review of the Commonwealth's Supplies and Materials and Controllable Assets". In general, we concur with your findings related to the audit test work and offer the following responses for inclusion in your published report.

METHODS AND SYSTEMS

Finding and Recommendation: Supplies and Materials Inventory

- ♦ Virginia State University has decentralized and varied inventory management methods and systems. The University leaves it up to each department to determine how to track and manage inventory. They do not provide guidance as to the types and levels of inventory that the departments should track and accumulate for accountability and financial reporting. The University should establish a policy to provide guidance on the management and control of supplies and a materials inventory and taking physical inventory. The university should consider the cost benefit to tracking and recording different classes of inventory. The university should consider providing an automated method for each department to track its inventory.

VSU Response:

- ♦ We agree that many areas currently inventoried are immaterial, and as your report indicated, we believe the cost to maintain such records would yield no benefit and lead to inefficiency. By January 2006, a policy will be established to address provisions for management and control of supplies and materials inventory and taking physical inventory. Prior to the preparation of our fiscal year 2006 financial statements, we will re-evaluate the materiality of supplies and materials inventory in accordance with the Financial Statement Directive to determine whether we need to revise our method of

accumulating and reporting the balances. We will also consider development of an automated inventory method for maintaining inventories, in conjunction with your recommendation to have the Commonwealth consider purchasing either a statewide inventory management system or having an inventory system under contract that individual agencies can affordably purchase and use as necessary. We look forward to statewide guidance on this issue as recommended in this report.

Finding and Recommendation: Controllable Assets

- ♦ Virginia State University does not ensure that the University records all required controllable assets into FAACS or the Controllable Asset Database. Of the assets tested, the University did not enter two of ten assets into the proper system. In addition, one of ten assets did not have a receiving report. We recommend that Virginia State University improve controls surrounding their controllable assets to ensure that they have proper support and personnel enter the appropriate assets into the appropriate system timely.

VSU Response:

The Fixed Assets Office has taken steps to ensure that all controllable and capitalized assets are entered into the proper systems timely and accurately and that the assets identified by the auditor are recorded. We are also reemphasizing existing policies regarding receiving reports.

POLICIES AND PROCEDURES

Agency Procedures

Finding and Recommendation: Supplies and Materials Inventory

- ♦ Most state agencies that we reviewed with the exception of Virginia State University and Brunswick Correctional Center have set minimum and maximum stock levels within their inventory system. We recommend that state agencies set minimum and maximum stock levels for inventory and that they use them accurately and consistently. The Department of Accounts should establish guidance on setting minimum and maximum stock levels for supplies and material inventory.

VSU Response:

We concur that setting and maintaining minimum and maximum stock levels is prudent in certain inventory situations. Based on our reevaluation of the materiality of our supply inventory areas and a cost benefit analysis of maintaining such inventories, we will establish minimum and maximum stock levels for the areas determined to require inventory with guidance from the Department of Accounts.

November 4, 2005

Response to "Review of the Commonwealth's Supplies and Materials and Controllable Assets"

Page 3

The University is committed to addressing these finding as expeditiously as possible and we look forward to receiving further statewide guidance on the subject.

Sincerely,

A handwritten signature in cursive script, reading "Clementine S. Cone".

Clementine S. Cone

Vice President for Administration and Finance

c: Dr. Eddie N. Moore, Jr., President
Mr. David A. Von Moll, State Comptroller
The Honorable Peter Blake, Secretary of Education



COMMONWEALTH of VIRGINIA

Department of General Services

James T. Roberts
Director

November 8, 2005

202 North Ninth Street
Suite 209
Richmond, Virginia 23219-3402
Voice/TDD (804) 786-6152
FAX (804) 371-8305

To: The Honorable Walter J. Kucharski,
Auditor of Public Accounts

From: James T. Roberts

Re: Statewide Inventory Review

The Department of General Services has no position on the content and recommendations contained in the draft report, Review of the Commonwealth's Supplies and Materials and Controllable Assets, which was presented to us on November 1, 2005. Considering the time allotted to us for review of the document, we can neither verify the information contained therein or otherwise agree or disagree with the conclusions.

Thank you for contacting us.